

CLAIMS

1. A method of realizing multi-picture, comprising the following steps:

5 A. a Multipoint Control Unit creating an indicator containing multi-picture information for each of the terminals and sending the indicator to each of the terminals;

10 B. each of the terminals receiving said indicator, encoding a source picture depending on the information in the multi-picture information indicator, and inserting said multi-picture information indicator into a sub-bitstream and transmitting the sub-bitstream to the Multipoint Control Unit;

15 C. when receiving the sub-bitstreams from the respective terminals, the Multipoint Control Unit combining the sub-bitstreams into a composite bitstream and sending the composite bitstream to a display terminal;

20 D. the display terminal receiving the composite bitstream, extracting the sub-bitstreams from the composite bitstream, decoding the sub-bitstreams depending on the multi-picture information indicator of the sub-bitstreams, and combining the decoded sub-pictures into a multi-picture output.

25 2. The method of realizing multi-picture as in claim 1, wherein said multi-picture information indicator refers to an ESBI that contains the information of multi-picture mode and positions, dimensions, and formats of sub-pictures.

30 3. The method of realizing multi-picture as in claim 2, wherein said ESBI is longer than two bits.

4. The method of implementing multi-picture as in claim 1, wherein the encoding of the source pictures according the information in the multi-picture information indicator in said step B specifically refers to encoding the source picture depending on the dimensions and format of the sub-picture contained in the multi-picture information indicator.

5. The method of realizing multi-picture as in claim 1, wherein the inserting of the ESBI into the sub-bitstream in said step B more specifically refers to that:

when the Multipoint Control Unit combines the sub-bitstreams in units of frames, the ESBI is inserted into a picture header of the sub-bitstream;

when the Multipoint Control Unit combines the sub-bitstreams in units of GOBs, the ESBI is inserted into both the picture header and a GOB header of the sub-bitstream;

when the Multipoint Control Unit combines the sub-bitstreams in units of Slices, the ESBI is inserted into both the picture header and a Slice header of the sub-bitstream.

6. The method of realizing multi-picture as in claim 1, wherein the combining into the composite bitstream in said step C more specifically refers to combining into the composite bitstream in units of frames, GOBs, or Slices.

7. The method of realizing multi-picture as in claim 1, wherein the extracting the respective sub-bitstreams from the composite bitstream in said step D refers to extracting the sub-bitstreams from the composite bitstream in units of frames, GOBs, or Slices.

8. The method of realizing multi-picture on the basis of CPM syntax as in claim 1, wherein the dependence on the multi-picture information indicators of the respective sub-bitstreams in said step D more specifically refers to that:

5 when the Multipoint Control Unit combines the sub-bitstreams in units of frames, it is depending on the multi-picture information indicator in the picture headers of the sub-bitstreams;

10 when the Multipoint Control Unit combines the sub-bitstreams in units of GOBs, it is depending on the multi-picture information indicator in the picture headers and the GOB headers of the sub-bitstreams;

15 when the Multipoint Control Unit combines the sub-bitstreams in units of Slices, it is depending on the multi-picture information indicators in the picture headers and the Slice headers of the sub-bitstreams.